AMENDMENTS TO THE CLAIMS

Please cancel pending claims 1-20 without prejudice and insert the following new claims 21-42:

21. (NEW) In an electronic device having an electrical circuit connected to live and neutral lines of an AC power supply via a bridge rectifier for the provision of DC power to the circuit, a method for ascertaining the AC power supply voltage, the method including providing a corrected voltage signal comprising a differential between signals representative of the live and neutral AC voltage signals, each signal referenced to a preselected common voltage reference point in the circuit of the device.

22. (NEW) The method of claimed in claim 21, in which the reference point is a floating earth point of the circuit and the method includes the steps of providing a first neutral error voltage signal representative of the voltage signal of the neutral line of the AC power supply with reference to the floating earth of the circuit, further comprising the steps of:

providing a second live error voltage signal representative of the voltage signal of the live line of the AC power supply with reference to the floating earth of the circuit; and

subtracting the first error voltage signal from the second error voltage signal to provide the corrected voltage signal.

23. (NEW) The method of claim 21, in which the reference point is a floating earth point of the circuit and the method includes the steps of providing a first neutral error voltage signal representative of the voltage signal of the neutral line of the AC power supply with reference to the floating earth of the circuit, further comprising the steps of:

providing a second live error voltage signal representative of the voltage signal of the live line of the AC power supply with reference to the floating earth of the circuit;

inverting the first error voltage signal ; and

adding the inverted signal to the second error voltage signal to provide the corrected voltage signal.

24. (NEW) The method of claim 23, in which the step of inverting the first error voltage signal is by means of an inverter.

25. (NEW) The method of claim 24, in which the inverter comprises an amplifier with an amplification of minus one.

26. (NEW) The method of claim 24, in which the bridge rectifier has a bridge rectifier circuit having first and second input nodes for connection respectively to live and neutral lines of the AC power supply and has positive and negative DC output nodes for connection to a load, and in which the step of inverting the first error voltage signal comprises inverting the voltage signal measured between a neutral input node of the rectifier bridge circuit and the floating earth point of the device driven by the power supply (the neutral error voltage) ; and the step of adding the inverted signal to the second error voltage signal to provide the corrected voltage signal comprises adding the inverted signal to the voltage signal measured between the live AC line and the floating earth of the device (the live error voltage).

27. (NEW) The method of claim 25, in which the bridge rectifier has a bridge rectifier circuit having first and second input nodes for connection respectively to live and neutral lines of the

AC power supply and has positive and negative DC output nodes for connection to a load, and in which the step of inverting the first error voltage signal comprises inverting the voltage signal measured between a neutral input node of the rectifier bridge circuit and the floating earth point of the device driven by the power supply (the neutral error voltage) ; and the step of adding the inverted signal to the second error voltage signal to provide the corrected voltage signal comprises adding the inverted signal to the voltage signal measured between the live AC line and the floating earth of the device (the live error voltage).

28. (NEW) The method of claim 21, in which the device is an electricity consumption meter (power meter).

29. (NEW) The method of claim 28, in which the power meter is a current transformer meter.

30. (NEW) In an electronic device having an electrical circuit connected to live and neutral lines of an AC power supply via a bridge rectifier for the provision of DC power to the circuit, a voltage ascertaining means operable to provide a voltage signal comprising a differential between voltage signals representative of the live and neutral AC voltage signals, each signal referenced to a preselected common voltage reference point in the circuit of the device.

31. (NEW) The voltage ascertaining means of claim 30, in which the bridge rectifier includes a bridge rectifier circuit having first and second input nodes for connection respectively to live and neutral lines of an AC power supply and having positive and negative DC output nodes for connection to a load and in which the voltage ascertaining means includes an error compensation circuit operably connected to the bridge rectifier circuit.

32. (NEW) The voltage ascertaining means of claim 31, in which the error compensation circuit includes means for providing a first neutral error voltage signal representative of the voltage signal of the neutral line of the AC power supply with reference to the floating earth of the circuit; means for providing a second live error voltage signal representative of the voltage signal of the live line of the AC power supply with reference to the floating earth of the circuit; and subtraction means for subtracting the first error voltage signal from the second error voltage signal to provide the corrected voltage signal.

33. (NEW) The voltage ascertaining means of claim 31, in which the error compensation circuit includes means for providing a first neutral error voltage signal representative of the voltage signal of the neutral line of the AC power supply with reference to the floating earth of the circuit; means for providing a second live error voltage signal representative of the voltage signal of the live line of the AC power supply with reference to the floating earth of the circuit; inverting means for inverting the first error voltage signal ; and addition means for adding the inverted signal to the second error voltage signal to provide the corrected voltage signal.

34. (NEW) The voltage ascertaining means of claim 33, in which the inverting means comprises an amplifier having an amplification of minus one.

35. (NEW) The voltage ascertaining means of claim 34, in which the inverter is operable to invert the voltage signal measured between a neutral input node of the rectifier bridge circuit and the floating earth point of the device driven by the power supply (the neutral error voltage) and to add the inverted signal to the voltage signal measured between the live AC line and the floating earth of the device (the live error voltage).

36. (NEW) The voltage ascertaining means of claim 35, in which the error compensation circuit is operably connected to a power supply for providing power to an energy consumption meter (power meter) for the measurement of power use from an AC power source, the energy meter providing the load for the power supply and being connected to the output nodes of the bridge rectifier circuit via the error compensation circuit; and the energy meter has a floating earth providing a reference for measuring the voltage of the AC signal to be metered, the error compensation circuit compensating for an error in the AC voltage signal measured by the meter by adding an inverted error compensating signal to the voltage signal measured by the meter between its floating earth and the live line of the AC power supply.

37. (NEW) The voltage ascertaining means as claimed in claim 32, in which the error compensation circuit is operably connected to a power supply for providing power to an energy consumption meter (power meter) for the measurement of power use from an AC power source, the energy meter providing the load for the power supply and being connected to the output nodes of the bridge rectifier circuit via the error compensation circuit; and the energy meter has a floating earth providing a reference for measuring the voltage of the AC signal to be metered, the error compensation circuit compensating for an error in the AC voltage signal measured by the meter by subtracting the error compensating signal from the voltage signal measured by the meter between its floating earth and the live line of the AC power supply.

38. (NEW) The voltage ascertaining means of claim 36, in which the electricity consumption meter (power meter) is a current transformer meter.

39. (NEW) The voltage ascertaining means of claim 37, in which the electricity consumption meter (power meter) is a current transformer meter.

40. (NEW) A bridge power supply incorporating a voltage ascertaining means as claimed claim 31.

41. (NEW) In an electronic device having an electrical circuit connected to live and neutral lines of an AC power supply via a bridge rectifier for the provision of DC power to the circuit, a method for ascertaining the AC power supply voltage substantially as herein described with reference to the accompanying diagrammatic drawings.

42. (NEW) In an electronic device having an electrical circuit connected to live and neutral lines of an AC power supply via a bridge rectifier for the provision of DC power to the circuit, a voltage ascertaining means substantially as herein described and illustrated with reference to the accompanying diagrammatic drawings.